UNITED STATES MARINE CORPS



MARINE CORPS INSTALLATIONS NATIONAL CAPITAL REGION MARINE CORPS BASE QUANTICO 3250 CATLIN AVENUE QUANTICO VIRGINIA 22134 5001

IN REPLY REFER TO:
MCINCR-MCBQO 6200.1C
B 031
21 Apr 16

MARINE CORPS INSTALLATIONS NATIONAL CAPITAL REGION-MARINE CORPS BASE QUANTICO ORDER 6200.1C

From: Commander

To: Distribution List

Subj: HEAT INJURY PREVENTION PROGRAM

Ref:

- (a) MCO 3500.27B (Operational Risk Management)
- (b) Naval Preventive Medicine: Chapter 9 (Preventive Medicine for Ground Forces), Section V (Prevention of Heat Injuries)
- (c) MARADMIN 111/15 Marine Corps Heat and Cold Stress Injury Prevention Program

Encl: (1) Guidelines for Physical Activity Restrictions

(2) Report III, Report NAVMED 6500/1

1. Situation

a. <u>Purpose</u>. The Heat Injury Prevention Program (HIPP) provides information necessary to regulate training and lower the incidence of heat-related injuries.

b. Information

- (1) The climate in Quantico, Virginia from May to September can best be described as extremely hot and humid. It is not uncommon for temperatures to reach 100 degrees with dew points rising above 80 percent. Each year during this period Marine Corps Installations National Capital Region-Marine Corps Base Quantico (MCINCR-MCBQ) experiences several heat casualties requiring medical evacuation (MEDEVAC) to a Naval Health Clinic or to a local emergency medical facility. Therefore, caution must be given to all commands and tenant activities aboard MCINCR-MCBQ to exercise sound judgment, operational risk management per reference (a), and good common sense while planning and supervising all activities. Furthermore, it is imperative that all commands not only be familiar with this order and references, but more importantly have firmly in place the means to educate all personnel on associated severe heat conditions and how to prevent and treat heat-related injuries.
- (2) Reference (b) contains comprehensive instructions regarding the prevention of, and first aid treatment for, heat-related injuries. Reference (c) provides interim guidance for Commanders and Officers-In-Charge for planning and executing heat and cold stress injury prevention. All permanent personnel supervising training will receive detailed instructions on enclosures (1) and (2) of this order.
- (3) Exposure to high ambient temperatures produces stress on the body. As the body attempts to compensate the high ambient temperatures,

physiological strain on the body will result. This strain, usually coupled with other strains caused by work, dehydration, and fatigue, may lead to the manifestation of heat disorders and disability. The environmental conditions that influence the heat equilibrium of the body and its physiologic adjustments are; air temperature, the temperature of surrounding objects, humidity, and air movement. The impact of these conditions is influenced by the type and amount of clothing worn and by the body's physiological mechanisms. The occurrence of heat injuries is not limited to hot weather. Although heat injury prevention has primary consideration during the period from 1 May to 30 September, it is a year-round concern for all training supervisors.

- 2. <u>Mission</u>. As directed, and in accordance with the references, the HIPP will provide instructions which will regulate training in order to minimize the number of heat-related injuries aboard MCINCR-MCBQ.
- 3. Cancellation. MCBO 6200.1B

4. Execution

- a. <u>Commander's Intent</u>. HIPP will provide detailed and timely heat safety information to MCINCR-MCBQ.
- b. <u>Concept of Operations</u>. HIPP provides heat safety information to MCINCR-MCBQ for the education of personnel on associated severe and consistent heat conditions and how to prevent and treat heat-related injuries.

c. Tasks

(1) Assistant Chief of Staff, G-3. Exercise staff cognizance over Range Management Branch (RMB).

(a) Range Control Officer, RMB

- 1. Operate stations and applicable equipment.
- $\underline{2}$. Obtain, record, and submit readings and reports per enclosure (2) of this order.
- $\underline{3}$. Provide MCINCR-MCBQ organizations and tenant activities located west of I-95 with accurate and timely flag and temperature readings. MCINCR-MCBQ organizations and tenant activities west of I-95 (Guadalcanal Area) include: The Basic School (TBS), Marine Corps Embassy Security Group, Explosive Ordnance Disposal, Natural Resources and Environmental Affairs, Weapons Training Battalion (WTBN), Ammunition Supply Point, Lunga Reservoir, Guad Maintenance, Federal Bureau of Investigation, I&I, D Co, 4th LAR Bn, Camp Upshur, Marine Corps Network Operations and Security Center, and Marine Corps Information Operations Center.
- (2) <u>Director, Public Affairs</u>. Utilizing social media, post messages, when appropriate, announcing that MCINCR-MCBQ has entered into a heat stress flag condition of "black" for either the East or West.
- (3) Adjutant, G-1. When appropriate, recommend late spring through summer months, ensure the MCINCR-MCBQ CDO is briefed on the proper procedures

for receiving Wet Bulb Globe Temperature (WBGT) readings via email from both Marine Corps Air Facility (MCAF) and RMB.

(4) Commanding Officer, MCAF

- (a) Ensure weekly WBGT or Heat Stress Indicator reading comparisons are conducted to ensure instrument accuracy.
- (b) If any organization utilizes different mechanical means of collecting temperature data, a comparison will still be made in order to gauge not only the accuracy, but the benefit or cost of either apparatus.
- (c) Provide MCINCR-MCBQ organizations and tenant activities located east of I-95 with accurate and timely flag and temperature readings.

(5) Commanding Officer, Officer Candidates School (OCS)

- (a) Ensure weekly WBGT or Heat Stress Indicator reading comparisons are conducted to ensure instrument accuracy.
- (b) If any organization utilizes different mechanical means of collecting temperature data, a comparison will still be made in order to gauge not only the accuracy, but the benefit or cost of either apparatus.
- (c) Serve as a secondary WBGT or Heat Stress Indicator reading location for MCINCR-MCBQ organizations and tenant activities located east of I-95.
- (d) Include heat prevention and mitigation strategies in unit standing operating procedures and programs of instruction for officer candidate training.

(6) Commanding Officer, Naval Health Clinic Quantico

- (a) Ensure branch clinics submit a copy of Report of Heat/Cold Casualty, NAVMED 6500/1, in accordance with reference (b), in every case of heat illness requiring the attention of a medical officer (see enclosure (2).
- (b) Forward required injury reports to the Director, Safety Division.
- (7) MCINCR-MCBQ Organizations and Tenant Activities. Establish standing operating procedures for the dissemination of flag and temperature readings to the personnel within your organization or activity.

d. Coordinating Instructions

- (1) <u>Heat Stress Flag Locations</u>. Heat stress flagpoles are located at various locations throughout MCINCR-MCBQ. There is no restriction on new heat stress flagpoles being erected, however it is requested that MCINCR-MCBQ G3 be notified once a new flagpole has been put into place. Below is a list of known flagpole locations aboard MCINCR-MCBQ, with the responsible organization listed in parenthesis.
 - (a) Lejeune Hall: Front, near Command flagpole, (ADJ/CDO).

- (b) MCAF: Opposite sentry booth (CO, MCAF).
- (c) OCS: Brown Field, front of reviewing stand (CO, OCS).
- (d) Staff Non-commissioned Officer Academy (SNCOA): Northeast corner of parade deck at street intersection (Director, SNCOA).
- (e) Expeditionary Warfare School (EWS): Southwest end of Geiger Hall (Director, EWS).
- (f) Headquarters and Service Battalion (HSBN): Between buildings 2006 and 2000 (CO, HSBN).
- (g) TBS: In front of Gonzalez Hall and in front of Heywood Hall (CO, TBS).
 - (h) WTBN: HQ Building 27211 (CO, WTBN).
- (i) Camp Upshur: Beside the water tower, building 26102 (I&I, D CO, 4th LAR BN).
- (j) Range Control: Front of Range Control building (Range Control Officer).
- (2) $\underline{\text{WBGT}}$. There are currently three WBGT index stations to serve MCINCR-MCBQ. These stations will provide reports based on the example found in enclosure (2).
 - (a) MCAF: East of I-95 (primary reading).
 - (b) OCS: East of I-95 (secondary reading).
 - (c) Range Control: Camp Barrett (TBS) West of I-95.
- (3) $\underline{\text{Action}}$. Commanders and leaders of tenant organizations aboard MCINCR-MCBQ will:
- (a) Be aware of the hours of operation at branch clinics before conducting training and/or exercises likely to result in heat stress.
- (b) Disseminate instructions contained in the references to all Marines engaged in training during hot weather.
- (c) Use the guidelines contained in enclosure (1) to determine the extent of physical activity allowed under the various heat stress data classifications.
- (d) Ensure all personnel who are responsible for the setup, monitoring, and care of the WBGT stations have a thorough knowledge of the provisions of the references and this order.
- (e) Ensure that all personnel assigned and trained to conduct temperature readings are thoroughly aware of the procedures outlined in the enclosures of this order.
 - (f) Commanders having WGBT stations under their cognizance will

maintain instrument sites and meters as required by this order and provide the readings for use in the regulation of training.

- (g) Ensure all personnel exercise sound judgment in adjusting activities during all flag conditions.
- (h) Instruct all personnel that in the event an injury occurs without medical attention immediately available, personnel are to call "911" (first from a landline if possible) for on scene emergency medical services (EMS). On scene EMS technicians will determine further medical assistance required or conduct a MEDEVAC.
- (4) <u>Civilian Employees</u>. Precautions shall be taken to alleviate hardships where employees are required to work in non-climate controlled areas during red and black heat flag conditions, such as diminished physical activities, extra rest and water breaks, and protection from the sun.

5. Administration and Logistics.

- (a) In addition to heat stress flag locations, personnel can call the MCINCR-MCBQ Command Duty Officer at (703) 784-5587 in order to confirm the latest heat stress flag condition. The MCINCR-MCBQ website will be updated at URL: http://www.quantico.marines.mil/Resources/Weather.aspx discussing the requirements of the various heat flag conditions.
- (b) Commanders and leaders of tenant organizations aboard MCINCR-MCBQ will ensure appropriate reporting of any heat related injury by:
- (1) Complete a Report of Heat/Cold Injury, enclosure (2), and forward to the Preventive Medicine Department at the Main Medical Clinic, MCB Quantico for entry into the Disease Reporting System Internet.
- (2) Appropriate incident (FLASH) reports are generated and forwarded to the unit's safety officer.

6. Command and Signal

- a. The Assistant Chief of Staff-G3, MCINCR-MCBQ may be contacted at 703-784-2658/4957/2860/3420, Monday through Friday from 0600 to 1630.
- b. Range Control, RMB, MCINCR-MCBQ may be contacted at 703-784-5321/5322 (all phone calls are recorded) to be added to their distribution list.
- c. MCAF S-3 may be contacted at 703-784-1459 to be added to their distribution list.
 - d. OCS S-3 may be contacted at 703-784-2565.
- e. Medical Emergency dial 911. If 911 services are unavailable, dial 703-784-2636 for the Emergency Communication Center.

A. D. BROUGHTON
Chief of Staff

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Chief of Staff

Signed by: BROUGHTON.ALLEN.DALE.1168122922

GUIDELINES FOR PHYSICAL ACTIVITY RESTRICTIONS

1. <u>Controlling Heat Casualties</u>. The Wet Bulb Globe Temperature (WBGT) Index combines shade, air temperature, radiation, humidity, and wind into a single value used as a guide for monitoring training and other physical activities. Training during the period of 1 May to 30 September will be conducted per the following heat/flag index:

FLAG CONDITION	WBGT INDEX	PHYSICAL ACTIVITY RESTRICTIONS				
Green	80 84.9	Heavy exercise for un-acclimatized personne should be conducted with caution and under constant supervision.				
Yellow	85 87.9	Strenuous exercises, such as hikes, close order drill, and obstacle courses suspended for un-acclimatized personnel. Outdoor classes in direct rays of the sun shall be avoided.				
Red	88.0 - 89.9	All physical training halted for those not thoroughly acclimatized. Those thoroughly acclimatized may perform limited activity not exceeding 6 hours.				
Black	90.0+	All strenuous nonessential outdoor physical activity will be halted as outlined per reference (a).				
Administrative Black Flag	All training	activities must halt. No emergency response personnel available to respond or Ray Hall "heat deck" is at maximum capacity.				

NOTE: Essential activities are defined as those activities associated with scheduled exercises or other major training evolution where the disruption would cause undue burden on personnel or resources, be excessively expensive, or significantly reduce a unit's combat readiness. Essential outdoor physical activity will be conducted at a level that is commensurate with personnel acclimatization as determined by the unit's Commanding Officer (CO) in coordination with the unit's medical officer or medical personnel. All efforts should be made to reschedule these activities during cooler periods of the day.

- 2. <u>Curtailment of Training</u>. As flag conditions progress from green to black, cumulative restrictions are placed on training. Violation of restrictions reduces the margin of safety beyond a permissible limit and results in the creation of heat casualties. COs will ensure all personnel exercise sound judgment in adjusting activities during all flag conditions.
- 3. Further information and guidance for Commanders, leadership and Medical Officers regarding heat injury prevention and acclimatization can be found below:

- a. Navy Environmental Health Center Technical Manual NEHC-TM-OEM 6260.6A June 2007 located at http://www.med.navy.mil/sites/nmcphc/Documents/policy-and-instruction/oem-prevention-and-treatment-of-heat-and-cold-stress-injuries.pdf
- b. Centers for Disease Control at http://www.cdc.gov/niosh/topics/heatstress/
- c. Occupational Safety and Health Administration at https://www.osha.gov/OshDoc/data_Hurricane_Facts/heat_stress.pdf

REPORT III, REPORT NAVMED 6500/1

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